

WHAT IS CLAIMED IS

1. An image processing apparatus comprising:

an image expansion unit to expand image compressed code and to output an expanded image data, the image compressed code is obtained by compressing a master image data;

an image display unit to display an image of the expanded image data on a display unit;

a picture quality judging unit to judge relative picture quality of the expanded image data with respect to a picture quality of the master image data, based on the image compressed code, and to output picture quality information indicating the relative picture quality; and

an image information display unit to display the picture quality information on the display unit.

2. The image processing apparatus as claimed in claim 1, wherein the picture quality judging unit comprises:

a master code information acquiring unit to acquire code information of the master image data included in the image compressed code;

a code information acquiring unit to acquire code information of the image compressed code; and

a picture quality information output unit to output, as the picture quality information, a comparison result of the code information acquired by the master code information acquiring unit and the code information acquired by the code information acquiring unit.

3. The image processing apparatus as claimed in claim 2, wherein:

the picture quality judging unit uses a number of code bits of the master image data as the code information included in the image compressed code;

the master code information acquiring unit acquires the number of code bits of the master image data as the code information of the master image data; and

the code information acquiring unit acquires a number of code bits of the image compressed code as the code information of the image compressed code.

4. The image processing apparatus as claimed in claim 2, wherein:

the image compressed code is obtained by encoding frequency conversion coefficients of the master image data in units of bit planes;

the picture quality judging unit uses a number of bit planes of the master image data as the code information included in the image compressed code;

the master code information acquiring unit acquires the number of bit planes of the master image data as the code information of the master image data; and

the code information acquiring unit acquires a number of bit planes of the image compressed code as the code information of the image compressed data.

5. The image processing apparatus as claimed in claim 2, wherein:

the image compressed code is obtained by encoding multiple resolution conversion coefficients of the master image data in units of resolutions;

the picture quality judging unit uses a resolution of the master image data as the code information included in the image compressed code;

the master code information acquiring unit acquires the resolution of the master image data as the code information of the master image data; and

the code information acquiring unit acquires a resolution of the image compressed code as the code information of the image compressed data.

6. The image processing apparatus as claimed in claim 2, wherein:

the image compressed code is obtained by dividing the master image data into a plurality of rectangular regions and encoding the master image data in units of rectangular regions;

the picture quality judging unit uses a number of rectangular regions of the master image data as the code information included in the image compressed code;

the master code information acquiring unit acquires the number of rectangular regions of the master image data as the code information of the master image data; and

the code information acquiring unit acquires a number of rectangular regions of the image compressed code as the code information of the image compressed data.

7. The image processing apparatus as claimed in claim 6, wherein predetermined rectangular regions have been subjected to a weighting, of the number of rectangular regions of the image compressed data acquired by the code information acquiring unit.

8. The image processing apparatus as claimed in claim 2, wherein:

the image compressed code is obtained by encoding the master image data, formed by dynamic image data, in frame units;

the picture quality judging unit uses a number of frames of the master image data as the code information included in the image compressed code;

the master code information acquiring unit acquires the number of frames of the master image data as the code information of the master image data; and

the code information acquiring unit acquires a number of frames of the image compressed code as the code information of the image compressed data.

9. A computer-readable storage medium that stores a computer program which, when executed by a computer, causes the computer to process image data, the computer program comprising:

an image expansion procedure causing the computer to expand an image compressed code and to output an expanded image data, the image compressed code is obtained by compressing a master image data;

an image display procedure causing the computer to display an image of the

expanded image data on a display unit;

a picture quality judging procedure causing the computer to judge a relative picture quality of the expanded image data with respect to a picture quality of the master image data, based on the image compressed code, and to output picture quality information indicating the relative picture quality; and

an image information display procedure causing the computer to display the picture quality information on the display unit.

10. The computer-readable storage medium as claimed in claim 9, wherein the picture quality judging procedure comprises:

a master code information acquiring procedure causing the computer to acquire code information of the master image data included in the image compressed code;

a code information acquiring procedure causing the computer to acquire code information of the image compressed code; and

a picture quality information output procedure causing the computer to output, as the picture quality information, a comparison result of the code information acquired by the master code information acquiring procedure and the code information acquired by the code information acquiring procedure.

11. An image processing method comprising:

expanding image compressed code and outputting an expanded image data, the image compressed code is obtained by compressing a master image data;

displaying an image of the expanded image data on a display unit;

judging relative picture quality of the expanded image data with respect to a picture quality of the master image data, based on the image compressed code, and to output picture quality information indicating the relative picture quality; and

displaying the picture quality information on the display unit.

12. The image processing method as claimed in claim 11, wherein judging

relative picture quality comprises:

acquiring code information of the master image data included in the image compressed code;
acquiring code information of the image compressed code; and
outputting as the picture quality information, a comparison result of the code information of the master image data and the code information of the image compressed code.

13. An image processing apparatus comprising:

image expansion means for expanding an image compressed code and for outputting an expanded image data, the image compressed code is obtained by compressing a master image data;

image display means for displaying an image of the expanded image data on a display unit;

picture quality judging means for judging a relative picture quality of the expanded image data with respect to a picture quality of the master image data, based on the image compressed code, and for outputting picture quality information indicating the relative picture quality; and

image information display means for displaying the picture quality information on the display unit.

14. An image processing apparatus comprising:

an image expansion unit to expand an image compressed code and to output an expanded image data, the image compressed code is obtained by compressing a master image data; and

a picture quality judging unit to judge a relative picture quality of the expanded image data with respect to a picture quality of the master image data, based on the image compressed code, and to generate picture quality information indicating the relative picture quality.

15. The image processing apparatus as claimed in claim 14, wherein the image quality judging unit generates the picture quality information based on a comparison of code information of the master image data included in the image compressed code and code information of the image compressed code, both the code information is selected from a group consisting of a number of code bits of image data, a number of bit planes of image data, a resolution of image data, a number of rectangular regions into which the master image data is divided upon encoding, and a number of frames of image data.

16. A computer-readable storage medium that stores a computer program which, when executed by a computer, causes the computer to process image data, the computer program comprising:

an image expansion procedure causing the computer to expand an image compressed code and to output an expanded image data, the image compressed code is obtained by compressing a master image data; and

a picture quality judging procedure causing the computer to judge relative picture quality of the expanded image data with respect to a picture quality of the master image data, based on the image compressed code, and to generate picture quality information indicating the relative picture quality.

17. The computer-readable storage medium as claimed in claim 16, wherein the image quality judging procedure causes the computer to generate the picture quality information based on a comparison of code information of the master image data included in the image compressed code and code information of the image compressed code, both the code information is selected from a group consisting of a number of code bits of image data, a number of bit planes of image data, a resolution of image data, a number of rectangular regions into which the master image data is divided upon encoding, and a number of frames of image data.

18. An image processing method comprising:
expanding an image compressed code and outputting an expanded image data, the image compressed code is obtained by compressing a master image data; and
judging a relative picture quality of the expanded image data with respect to a picture quality of the master image data, based on the image compressed code, and generating picture quality information indicating the relative picture quality.

19. The image processing method as claimed in claim 18, wherein judging the relative picture quality generates the picture quality information based on a comparison of code information of the master image data included in the image compressed code and code information of the image compressed code, both the code information is selected from a group consisting of a number of code bits of image data, a number of bit planes of image data, a resolution of image data, a number of rectangular regions into which the master image data is divided upon encoding, and a number of frames of image data.